



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:

Source:

Date Processed by STIC:

10/714,343
IFWO
7/7/04

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT
MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER
VERSION 4.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND
TRADEMARK OFFICE WEBSITE SEE BELOW FOR ADDRESS

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/efb/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 06/05/04):
U.S. Patent and Trademark Office, 220 20th Street S., Customer Window, Mail Stop Sequence, Crystal Plaza Two, Lobby,
Room 1B03, Arlington, VA 22202

Revised 05/17/04



IFWO

RAW SEQUENCE LISTING

DATE: 07/07/2004

PATENT APPLICATION: US/10/714,343

TIME: 16:14:52

Input Set : A:\54275.8016.US01.ST25.txt

Output Set: N:\CRF4\07072004\J714343.raw

3 <110> APPLICANT: Zengen, Inc.
 5 <120> TITLE OF INVENTION: Modified Alpha-MSH Peptides and Derviatives Thereof
 7 <130> FILE REFERENCE: 54275.8016.US01
 9 <140> CURRENT APPLICATION NUMBER: 10/714,343
 10 <141> CURRENT FILING DATE: 2003-11-14
 12 <160> NUMBER OF SEQ ID NOS: 46
 14 <170> SOFTWARE: PatentIn version 3.1
 16 <210> SEQ ID NO: 1
 17 <211> LENGTH: 8
 18 <212> TYPE: PRT
 19 <213> ORGANISM: Artificial
 22 <220> FEATURE:
 23 <221> NAME/KEY: MISC_FEATURE
 24 <222> LOCATION: (7)..(7)
 25 <223> OTHER INFORMATION: X is DPhe
 28 <400> SEQUENCE: 1
 W--> 30 His Phe Arg Trp Gly Lys Xaa Val
 31 1 5
 34 <210> SEQ ID NO: 2
 35 <211> LENGTH: 8
 36 <212> TYPE: PRT
 37 <213> ORGANISM: Artificial Sequence
 39 <220> FEATURE:
 40 <223> OTHER INFORMATION: Designed Peptide
 42 <220> FEATURE:
 43 <221> NAME/KEY: MISC_FEATURE
 44 <222> LOCATION: (2)..(2)
 45 <223> OTHER INFORMATION: X is Phe or DNal
 48 <400> SEQUENCE: 2
 W--> 50 His Xaa Phe Trp Gly Lys Pro Val
 51 1 5
 54 <210> SEQ ID NO: 3
 55 <211> LENGTH: 8
 56 <212> TYPE: PRT
 57 <213> ORGANISM: Artificial
 59 <220> FEATURE:
 60 <221> NAME/KEY: MISC_FEATURE
 61 <222> LOCATION: (2)..(7)
 62 <223> OTHER INFORMATION: X is Phe or DPhe
 65 <400> SEQUENCE: 3
 W--> 67 His Xaa Arg Trp Gly Lys Xaa Val
 68 1 5
 71 <210> SEQ ID NO: 4

Handwritten notes:
 - pls see error explanation (Pg. 6)
 - mandatory, if (213)
 - Response is artificial/
 - unknown, please explain in section 2207-2237.
 - Does Not Comply
 - Corrected Diskette Needed (Pg. 1-5)
 - please define, as Xaa
 - Invalid Response
 - What is the source of genetic material?
 - pls define, as Xaa
 - same error, pls see error explanation on page 6.
 - same error

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Input Set : A:\54275.8016.US01.ST25.txt

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72 <211> LENGTH: 8
 73 <212> TYPE: PRT
 74 <213> ORGANISM: Artificial
 76 <220> FEATURE:
 77 <221> NAME/KEY: MISC_FEATURE
 78 <222> LOCATION: (7)..(7)
 79 <223> OTHER INFORMATION: X is an amino acid bearing a non-polar fnc group.
 82 <400> SEQUENCE: 4

W--> 84 His Phe Arg Trp Gly Lys Xaa Val

85 1 5

88 <210> SEQ ID NO: 5

89 <211> LENGTH: 8

90 <212> TYPE: PRT

91 <213> ORGANISM: Artificial

93 <220> FEATURE:

94 <221> NAME/KEY: MISC_FEATURE

95 <222> LOCATION: (8)..(8)

96 <223> OTHER INFORMATION: X is an aa other than val having a non-polar functional group

or

97 a hydrophobic functional group.

100 <400> SEQUENCE: 5

W--> 102 His Phe Arg Trp Gly Lys Pro Xaa

103 1 5

106 <210> SEQ ID NO: 6

107 <211> LENGTH: 8

108 <212> TYPE: PRT

109 <213> ORGANISM: Artificial

111 <220> FEATURE:

112 <221> NAME/KEY: MISC_FEATURE

113 <222> LOCATION: (6)..(6)

114 <223> OTHER INFORMATION: X is an aa, not including Lys, having a non-polar functional group

115 p.

118 <400> SEQUENCE: 6

W--> 120 His Phe Arg Trp Gly Xaa Pro Val

121 1 5

124 <210> SEQ ID NO: 7

125 <211> LENGTH: 8

126 <212> TYPE: PRT

127 <213> ORGANISM: Artificial

129 <220> FEATURE:

130 <221> NAME/KEY: MISC_FEATURE

131 <222> LOCATION: (7)..(7)

132 <223> OTHER INFORMATION: X is an aa with positively charged fuctionnal group.

135 <400> SEQUENCE: 7

W--> 137 His Phe Arg Trp Gly Lys Xaa Val

138 1 5

141 <210> SEQ ID NO: 8

142 <211> LENGTH: 8

143 <212> TYPE: PRT

144 <213> ORGANISM: Artificial

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146 <220> FEATURE:
 147 <221> NAME/KEY: MISC_FEATURE
 148 <222> LOCATION: (7)..(7)
 149 <223> OTHER INFORMATION: X is an aa having a negatively charged functional group.
 152 <400> SEQUENCE: 8
 W--> 154 His Phe Arg Trp Gly Lys Xaa Val
 155 1 5
 158 <210> SEQ ID NO: 9
 159 <211> LENGTH: 8
 160 <212> TYPE: PRT
 161 <213> ORGANISM: Artificial
 163 <220> FEATURE:
 164 <221> NAME/KEY: MISC_FEATURE
 165 <222> LOCATION: (2)..(7)
 166 <223> OTHER INFORMATION: X at 2 is DPhe or DNal and X at 7 is an aa having a negatively charged functional group
 167 arged functional group
 170 <400> SEQUENCE: 9
 W--> 172 His Xaa Arg Trp Gly Lys Xaa Val
 173 1 5
 176 <210> SEQ ID NO: 10
 177 <211> LENGTH: 8
 178 <212> TYPE: PRT
 179 <213> ORGANISM: Artificial
 181 <220> FEATURE:
 182 <221> NAME/KEY: MISC_FEATURE
 183 <222> LOCATION: (4)..(4)
 184 <223> OTHER INFORMATION: Trp is DTrp
 187 <400> SEQUENCE: 10
 189 His Phe Arg Trp Gly Lys Pro Val
 190 1 5
 193 <210> SEQ ID NO: 11
 194 <211> LENGTH: 8
 195 <212> TYPE: PRT
 196 <213> ORGANISM: Artificial
 198 <220> FEATURE:
 199 <221> NAME/KEY: MISC_FEATURE
 200 <222> LOCATION: (7)..(7)
 201 <223> OTHER INFORMATION: X is an uncharged functional group polar aa.
 204 <400> SEQUENCE: 11
 W--> 206 His Phe Arg Trp Gly Lys Xaa Val
 207 1 5
 210 <210> SEQ ID NO: 12
 211 <211> LENGTH: 8
 212 <212> TYPE: PRT
 213 <213> ORGANISM: Artificial
 215 <220> FEATURE:
 216 <221> NAME/KEY: MISC_FEATURE
 217 <222> LOCATION: (2)..(7)
 218 <223> OTHER INFORMATION: X at 2 is DPhe or DNal; X at 7 is an aa with an uncharged polar f

Same errors

Same errors

- Same error

Same errors

Same errors

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Input Set : A:\54275.8016.US01.ST25.txt

Output Set: N:\CRF4\07072004\J714343.raw

219 unctional group.
 222 <400> SEQUENCE: 12
 W--> 224 His Xaa Arg Trp Gly Lys Xaa Val
 225 1 5
 228 <210> SEQ ID NO: 13
 229 <211> LENGTH: 13
 230 <212> TYPE: PRT
 231 <213> ORGANISM: Homo sapiens
 233 <400> SEQUENCE: 13
 235 Ser Tyr Ser Met Glu His Phe Arg Trp Gly Lys Pro Val
 236 1 5 10
 239 <210> SEQ ID NO: 14
 240 <211> LENGTH: 39
 241 <212> TYPE: PRT
 242 <213> ORGANISM: Homo sapiens
 244 <400> SEQUENCE: 14
 246 Ser Tyr Ser Met Glu His Phe Arg Trp Gly Lys Pro Val Gly Lys Lys
 247 1 5 10 15
 250 Arg Arg Pro Val Lys Val Tyr Pro Ala Lys Glu Asp Asp Glu Ala Ser
 251 20 25 30
 254 Glu Ala Phe Pro Leu Glu Phe
 255 35
 258 <210> SEQ ID NO: 15
 259 <211> LENGTH: 7
 260 <212> TYPE: PRT
 261 <213> ORGANISM: Artificial
 W--> 263 <220> FEATURE:
 W--> 263 <223> OTHER INFORMATION:
 W--> 263 <400> 15
 265 Met Glu His Phe Arg Trp Gly
 266 1 5
 269 <210> SEQ ID NO: 16
 270 <211> LENGTH: 3
 271 <212> TYPE: PRT
 272 <213> ORGANISM: Artificial
 W--> 274 <220> FEATURE:
 W--> 274 <223> OTHER INFORMATION:
 W--> 274 <400> 16
 276 Lys Pro Val
 277 1
 280 <210> SEQ ID NO: 17
 281 <211> LENGTH: 4
 282 <212> TYPE: PRT
 283 <213> ORGANISM: Artificial
 W--> 285 <220> FEATURE:
 W--> 285 <223> OTHER INFORMATION:
 W--> 285 <400> 17
 287 His Phe Arg Trp
 288 1

- pls explain

pls insert these (2)
 numeric identifiers.
 pls see error explanation
 on page 6.

- Same error

- Same error

RAW SEQUENCE LISTING

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TIME: 16:14:52

Input Set : A:\54275.8016.US01.ST25.txt

Output Set: N:\CRF4\07072004\J714343.raw

291 <210> SEQ ID NO: 18
 292 <211> LENGTH: 8
 293 <212> TYPE: PRT
 294 <213> ORGANISM: Artificial
 296 <220> FEATURE:
 297 <221> NAME/KEY: MISC_FEATURE
 298 <222> LOCATION: (8)..(8)
 299 <223> OTHER INFORMATION: Val is DVal
 302 <400> SEQUENCE: 18

304 His Phe Arg Trp Gly Lys Pro Val
 305 1 5

308 <210> SEQ ID NO: 19

309 <211> LENGTH: 8

310 <212> TYPE: PRT

311 <213> ORGANISM: Artificial

W--> 313 <220> FEATURE:

W--> 313 <223> OTHER INFORMATION:

W--> 313 <400> 19

315 His Phe Arg Trp Gly Ala Pro Val

316 1 5

319 <210> SEQ ID NO: 20

320 <211> LENGTH: 8

321 <212> TYPE: PRT

322 <213> ORGANISM: Artificial

W--> 324 <220> FEATURE:

W--> 324 <223> OTHER INFORMATION:

W--> 324 <400> 20

326 His Phe Arg Trp Gly Lys Ala Val

327 1 5

330 <210> SEQ ID NO: 21

331 <211> LENGTH: 8

332 <212> TYPE: PRT

333 <213> ORGANISM: Artificial

W--> 335 <220> FEATURE:

W--> 335 <223> OTHER INFORMATION:

W--> 335 <400> 21

337 His Phe Arg Trp Gly Lys Pro Ala

338 1 5

341 <210> SEQ ID NO: 22

342 <211> LENGTH: 8

343 <212> TYPE: PRT

344 <213> ORGANISM: Artificial

346 <220> FEATURE:

347 <221> NAME/KEY: MISC_FEATURE

348 <222> LOCATION: (2)..(2)

349 <223> OTHER INFORMATION: Phe is DPhe

352 <400> SEQUENCE: 22

354 His Phe Arg Trp Gly Lys Pro Val

355 1 5

The type of errors shown exist throughout
 the Sequence Listing. Please check subsequent
 sequences for similar errors.

RAW SEQUENCE LISTING ERROR SUMMARY
 PATENT APPLICATION: US/10/714,343

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Input Set : A:\54275.8016.US01.ST25.txt
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 7
 Seq#:2; Xaa Pos. 2
 Seq#:3; Xaa Pos. 2,7
 Seq#:4; Xaa Pos. 7
 Seq#:5; Xaa Pos. 8
 Seq#:6; Xaa Pos. 6
 Seq#:7; Xaa Pos. 7
 Seq#:8; Xaa Pos. 7
 Seq#:9; Xaa Pos. 2,7
 Seq#:11; Xaa Pos. 7
 Seq#:12; Xaa Pos. 2,7
 Seq#:23; Xaa Pos. 2
 Seq#:27; Xaa Pos. 2
 Seq#:28; Xaa Pos. 2
 Seq#:30; Xaa Pos. 2
 Seq#:32; Xaa Pos. 2
 Seq#:37; Xaa Pos. 2
 Seq#:38; Xaa Pos. 2
 Seq#:42; Xaa Pos. 2
 Seq#:44; Xaa Pos. 2
 Seq#:46; Xaa Pos. 2

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,3,4,5,6,7,8,9,10,11,12,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30
 Seq#:31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46

Use of <220> Feature (NEW RULES): **ERROR Explanation:** ✓
 Sequence(s) are missing the <220> Feature and associated headings.
 Use of <220> to <223> is MANDATORY if <213> ORGANISM is "Artificial Sequence" or "Unknown". Please explain source of genetic material in <220> to <223> section (See "Federal Register," 6/01/98, Vol. 63, No. 104, pp.29631-32) (Sec.1.823 of new Rules)

Seq#:15,16,17,19,20,21,25,29,31,33,39,43,45

VERIFICATION SUMMARY

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Input Set : A:\54275.8016.US01.ST25.txt

Output Set: N:\CRF4\07072004\J714343.raw

L:30 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
L:50 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
L:67 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:84 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:102 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:120 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:137 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:154 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
L:172 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
L:206 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
L:224 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0
L:263 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:15, <213>
ORGANISM:Artificial
L:263 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:15, <213>
ORGANISM:Artificial
L:263 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:15,Line#:263
L:274 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:16, <213>
ORGANISM:Artificial
L:274 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:16, <213>
ORGANISM:Artificial
L:274 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:16,Line#:274
L:285 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:17, <213>
ORGANISM:Artificial
L:285 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:17, <213>
ORGANISM:Artificial
L:285 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:17,Line#:285
L:313 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:19, <213>
ORGANISM:Artificial
L:313 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:19, <213>
ORGANISM:Artificial
L:313 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:19,Line#:313
L:324 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:20, <213>
ORGANISM:Artificial
L:324 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:20, <213>
ORGANISM:Artificial
L:324 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:20,Line#:324
L:335 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:21, <213>
ORGANISM:Artificial
L:335 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:21, <213>
ORGANISM:Artificial
L:335 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:21,Line#:335
L:371 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:0
L:397 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:25, <213>
ORGANISM:Artificial
L:397 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:25, <213>
ORGANISM:Artificial
L:397 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:25,Line#:397
L:433 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0
L:450 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0
L:459 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:29, <213>
ORGANISM:Artificial
L:459 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:29, <213>
ORGANISM:Artificial

L:459 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:29,Line#:459
L:478 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0
L:487 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:31, <213>
ORGANISM:Artificial
L:487 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:31, <213>
ORGANISM:Artificial
L:487 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:31,Line#:487
L:506 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:0
L:515 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:33, <213>
ORGANISM:Artificial
L:515 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:33, <213>
ORGANISM:Artificial
L:515 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:33,Line#:515
L:591 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:0
L:608 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:0

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L:617 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:39, <213>
ORGANISM:Artificial

L:617 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:39, <213>
ORGANISM:Artificial

L:617 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:39,Line#:617

L:670 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:0

L:679 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:43, <213>
ORGANISM:Artificial

L:679 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:43, <213>
ORGANISM:Artificial

L:679 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:43,Line#:679

L:698 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44 after pos.:0

L:707 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ#:45, <213>
ORGANISM:Artificial

L:707 M:258 W: Mandatory Feature missing, <223> Tag not found for SEQ#:45, <213>
ORGANISM:Artificial

L:707 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:45,Line#:707

L:726 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46 after pos.:0